## Remarks

Further and favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

On page 2 of the Office Action, the Examiner requires a drawing to illustrate the subject matter of this application. Proposed Drawings for Figs. 1-3 are submitted herewith, together with a Proposed Brief Description of the Drawings, based on the disclosure in the last full paragraph on page 8; page 11, line 5 to page 12, line 2; and the Examples. Upon approval of the proposed drawings and brief description thereof, formal drawings will be submitted and the specification will be amended to incorporate the brief description of the drawings.

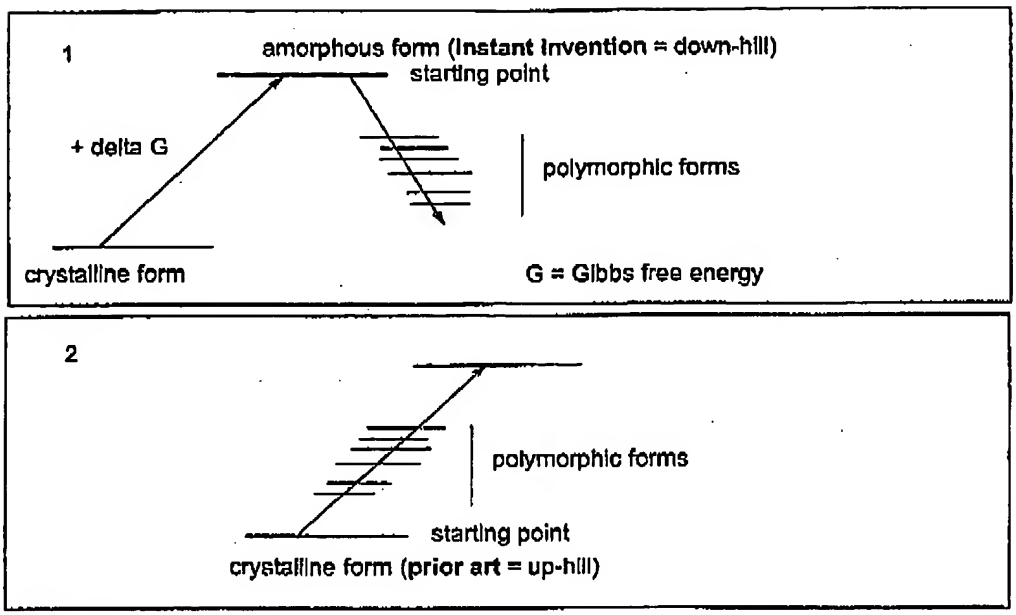
In response to the rejection of claims 1, 3 and 7-10 under the second paragraph of 35 U.S.C. 112, claim 1 has been amended to insert a definition for "substantially amorphous", which is based on the disclosure in the second paragraph on page 3 of the specification. In view of this, the rejection of the claims under the second paragraph of 35 U.S.C. 112 has been rendered moot.

In response to the rejection of claim 10 under 35 U.S.C. 101, this claim has been rewritten in independent form, by incorporating the process language from amended claim 1, rendering the rejection moot.

The patentability of the presently claimed invention over the disclosures of the references relied upon by the Examiner in rejecting the claims will be apparent upon consideration of the following remarks.

Thus, the rejection of claims 1-2 and 6-10 under 35 U.S.C. 102(e) as being anticipated by Stahly (U.S. '064), as well as the rejection of claims 3-5 under 35 U.S.C. 103(a) as being unpatentable over this reference, are respectfully traversed.

The following table and schemes 1 and 2 serve as an overview and as a quick reference for certain terms used in the following discussion of the instant invention and cited references:




| | |
|---|---|
| crystalline form [ | - lowest free energy<br>- highest thermodynamic stability |
| amorphous form [ | - highest free energy<br>- least thermodynamic stability |

The references all deal with solid-form screening methods that are predominantly applicable to molecular solid forms, pharmaceuticals in particular. Roughly estimated: about 90% of these substances are first obtained in crystalline form and about 10% are first obtained in the amorphous form. This is why the authors mention that screenings can in principle be carried out with crystalline material or amorphous material.

It is well known that the amorphous form is the solid form with the highest free energy, i.e. the free energy of the amorphous form is higher than all existing polymorphs or solvates.

The instant invention teaches that, if a solid is crystalline (see scheme 1 "crystalline form", the extra step [+ delta G (G = Gibbs free energy) in scheme 1] to produce amorphous substance (see scheme: "amorphous form"), then using this amorphous substance for solid form screening (for polymorphic forms in scheme 1) is beneficial (see also last two paragraphs on page 7 of the specification). Beneficial in the sense that this method needs a substantially smaller number of experiments to explore the polymorph or solid form landscape of a given compound (a more efficient method). The method is based on exploiting the high free energy of the amorphous form versus existing crystalline forms (if such exist) thus, leading to a thermodynamically favorable situation (because states of lower energy are being sought, i.e., this

is a "down-hill" process from the thermodynamic stability viewpoint (see scheme 1)). Thus, the instant invention leads to solid-forms with lower free energy than the starting material.

In contrast thereto, Stahly et al. (US 6,750,064) present a solid-form screening process to be carried out in capillaries, here referred to as the "capillary method". In another patent from Stahly et al, US 6,642,060, which is describing a very similar invention, it is mentioned that the "capillary method" is well suitable for producing high energy forms. Therefore the methods presented in both patents lead to solid forms of higher free energy; this is clearly stated in US 6,642,060, but is also valid for cited US 6,750,064. This is an up-hill process from a thermodynamic stability viewpoint (see scheme 2) and this is in fact the opposite from the instant invention.

Furthermore, none of the examples, in either document, mentions that an amorphous form is used.

For these reasons, Applicants take the position that the presently claimed invention is neither anticipated nor suggested by the Stahly et al. reference.

The rejection of claims 1-4 and 6-10 under 35 U.S.C. 102(b) as being anticipated by Hilfiker et al., as well as the rejection of claim 5 under 35 U.S.C. 103(a) as being unpatentable over this reference, are respectfully traversed.

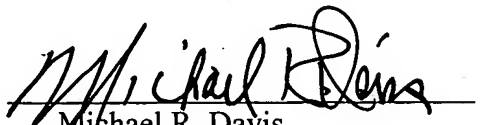
Hilfiker et al. disclose a high-throughput polymorphism screening method using as an example carbamazepine as starting material, a substance known to be in a crystalline form as usually available from commercial sources and as taught by the Merck Index. Please note that Hilfiker et al. explicitly use the "thermodynamically stable form" of Carbamazepine form III (page 433, line 5 from bottom) and thus, clearly teaches away from the instant invention.

In conclusion, none of the references teach that solid-form screening can be carried out in a more efficient way, using less high-throughput screening experiments, by using an amorphous form as the starting material for the screening process. Consequently, the instant invention is considered to be novel and non-obvious.

Therefore, in view of the foregoing amendments and remarks, it is submitted that each of the grounds of rejection set forth by the Examiner has been overcome, and that the application is in condition for allowance. Such allowance is solicited.

Respectfully submitted,

Fritz BLATTER et al.

By 

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